Patricia Grace Smith

Associate Administrator for Commercial Space Transportation

Transcript of Modified Voice Live December 4, 2002 Interview

Music

Narrator: From our Voice Live Studio in Washington, D.C., please welcome your host, Jerry Levy.

Jerry Levy: Patti, thanks for coming on the show. I appreciate your taking the time. What is commercial space all about?

AA Smith: Think about commercial space as transportation. I think that's the best way to look at it. It is going from point A to point B, and with our new authority to license reentry, coming back to A, intended to come back to A. Commercial space is one of the three space sectors we have in this country: military space being the DOD [Department of Defense], civil space being NASA [National Aeronautics and Space Administration], and commercial space being FAA [Federal Aviation Administration]. So whenever a launch vehicle you hear about, read about, [or] see it on television about a launch that has taken place and, for the moment, does not have people on the launch vehicle but rather is carrying a

service in the payload to orbit. It is experimental or something like that. It is a commercial launch.

Jerry Levy: Okay. So distinguish between commercial and civil aviation, what NASA does.

AA Smith: Civil space today is the shuttle, the space station.

Jerry Levy: Okay, got it. Got it.

AA Smith: Civil applications.

Jerry Levy: So we have no regulatory authority or anything over them?

AA Smith: No. Those are launches by and for the government, and we don't license those.

Jerry Levy: I see. So what do you do? How big is the Office of Commercial Space Transportation?

AA Smith: Our office today is sixty-nine (69).

Jerry Levy: Sixty-nine people, and they are all here in Washington?

AA Smith: We have one brand new office that opened on the 4th of November, located at Patrick Air Force Base, [Florida]. It's our first foray outside of Washington. And that person in my eyes and ears, the FAA's eyes and ears outside of Washington, working at Patrick AFB at Cape Canaveral to continue the message, to convey the message of commercial space in the military environment and to forge the relationship between the Air Force and the FAA.

Jerry Levy: Now, that's one of the major launch sites, I assume, Cape Canaveral?

AA Smith: Yes, it is.

Jerry Levy: Okay. Let me ask you, I am going to use it in connection with this brochure that you passed out at this morning's meeting. [Editor's note: This brochure is not available on-line.] This is a Delta IV rocket; a Boeing, as I take it?
AA Smith: [Indicating yes] Boeing.

Jerry Levy: That was launched just last night.

AA Smith: Last night.

Jerry Levy: And there was one just launched a little bit before that, the Atlas V, I think it was, just recently. Explain to us what our role was in that. Who was where? What did they do? What was the preparation beforehand, etc., if you can do that briefly?

AA Smith: Sure. Our role is to license and regulate the U.S. commercial space transportation industry.

Jerry Levy: Right.

AA Smith: Also to facilitate its growth and development, thereby its international competitiveness. At the very point that the Evolved Expendable Launch Vehicle (EELV) Program, and that's what EELV stands for. That's what a Delta IV vehicle is, and an Atlas V is an EELV. Once it was decided that this government [and] industry partnership would go forth to develop these vehicles, to increase the capability of the U.S. industry, it's reliability and affordability, to be utilized for

both government and commercial launches, we were contacted by both companies, and they began their preparation of a license application. In as much as this is a first vehicle, we issued a launch specific license to them. We have two types of licenses: launch operator, once they have proven themselves under a launch specific license. Brand new vehicle, to be able to accommodate almost any payload, therefore, making us much more competitive with ***Ariane*** and other world launchers. Once we got underway with the license application and taking it through our licensing process, looking at a safety evaluation—

Jerry Levy: So we are looking at the rocket itself to say this thing, this meets certain standards. Is that what we're doing?

AA Smith: We license the operations of the rocket.

Jerry Levy: The operations, not the rocket that's out there?

AA Smith: Not the rocket itself. The operations of the rocket and the operations of launch sites because we also license those.

Jerry Levy: Okay.

AA Smith: Once we engage our application process, and by statute we have 180 days to issue a license, we do a payload evaluation, safety evaluation, environmental evaluation. There are other parts of our licensing process. The fact that we do an environmental evaluation relates to the fact that a license is considered a major Federal action; therefore, we are bound by NEPA regulations.

Jerry Levy: National Environmental Protection (*sic*) Act?

AA Smith: National Environmental Protection (*sic*) Act. Once we have issued the license to the company, we don't disengage. Our work really begins then, to prepare for the launch with the Air Force as our partner in the process. We have an advance person now at Patrick [AFB] who advances the safety inspection team that goes down in advance of the launch. They sit in on all of the ops status meetings, operational status meetings, the launch readiness reviews. They work very, very closely to ensure that the licensee is fully compliant with what we've set forth in the license. Because we also have enforcement authority. Right down to the count down, the final count down, we have the authority to stop the launch, suspend the launch, or revoke the license if they are not in compliance.

Jerry Levy: So we have a person right there when it's 10, 9, 8. If that person, he or she, sees something untoward, they can say, "stop the launch."

AA Smith: Absolutely. And it would be recognized by those in the Mission Control Center, or the Range Operations Center as it's called now. Last night, for example, at the launch, we were here in Washington at the Boeing Facility, watching the count down on the big screens, listening to the count down. I was constantly on the cell phone, talking to my contact there, as well as our Duty Officer. So we were constantly in communication as there were constraints. At one point there was a wind constraint. After that was resolved, and the count down was resumed, we continued to talk. Right up until the time of count down our people are fully engaged. We have a position at console just as the launch operations person does, as the Wing Commander does at Patrick and at Vandenberg AFB, primarily. And in the polling process, in the future —it's a part of our statute; it's a part of our regulation — we will have a voice in the poll process. We do now, but we will be exercising our voice in the poll, so that if we say NO GO in the polling chain, the launch has to stop.

Jerry Levy: It's not going to go?

AA Smith: Absolutely.

Jerry Levy: Yes. When you talk about an expendable launch vehicle, is that what you call it?

AA Smith: Yes.

Jerry Levy: That means it goes out there, and it doesn't come back.

AA Smith: That's right.

Jerry Levy: It disintegrates into space or whatever.

AA Smith: That's right.

Jerry Levy: Right. Okay. What are they sending out there, communications satellites? What are the kinds of things that they're launching?

AA Smith: The majority of payloads that we've always launched on expendable launch vehicles has been telecom[munication] payloads, communications services. You know, how we get our paging services.

Jerry Levy: Yeah, we can use ourselves. Got you. You know, it seems to me that if you just look down the road, and it probably wont be that far, if we had these reusable entry vehicles, help me with the language here, but things that actually go out into space and return.

AA Smith: Reusable launch vehicles and reentry vehicles.

Jerry Levy: That's going to change the whole ball game in terms of aerospace management, and its got to be a critical part of our futuristic planning.

AA Smith: It absolutely has to be Jerry, and one of the things that my office prides itself in doing is being able to anticipate and play a role in shaping the future. We have a very aggressive vision to be recognized as the foremost authority for space launch and market assessments. Our industry likes that vision.

Jerry Levy: Good. Patti, let's play future vision stuff here a little bit. What do you think? Where do you see commercial space in 20 years? I mean whether it's in terms of volume or activity, whatever or however you want to — How do you see it in your mind's eye?

AA Smith: I see a much more robust market, with multiple capabilities. I see us in a much more competitive position. I see greater recognition of the fact that space transportation, commercial space transportation, is not only not only in the national security interest of the country but the economic interests of the country. It's a part of our economic security going forward.

Jerry Levy: Yeah.

AA Smith: I see airport-like operations. In other words, with launch sites around the world, I see interchangeability. In terms of if a launch site is not available in one location and it is another, to be able to launch a vehicle, whatever launch site is up next, much in the way of slots in airports, that would be how launches would be accommodated. I see space travel coming on board at some point. I can't put a fine point on that, but I know there's an awful lot of interest in that.

Jerry Levy: Let's just play with that one for a second because that's of compelling interest. Do you think [in] 20, 30, 40 years, people will be going into space and returning?

AA Smith: I really think that depends on the market demand.

Jerry Levy: Yeah.

AA Smith: The extent to which people become more and more familiar with the capabilities afforded by commercial space transportation kind of drives that.

Jerry Levy: Right. That's great. You're getting me excited about commercial space. Patti, thanks very much for coming in. I appreciate it.

AA Smith: Thank you, Jerry.

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